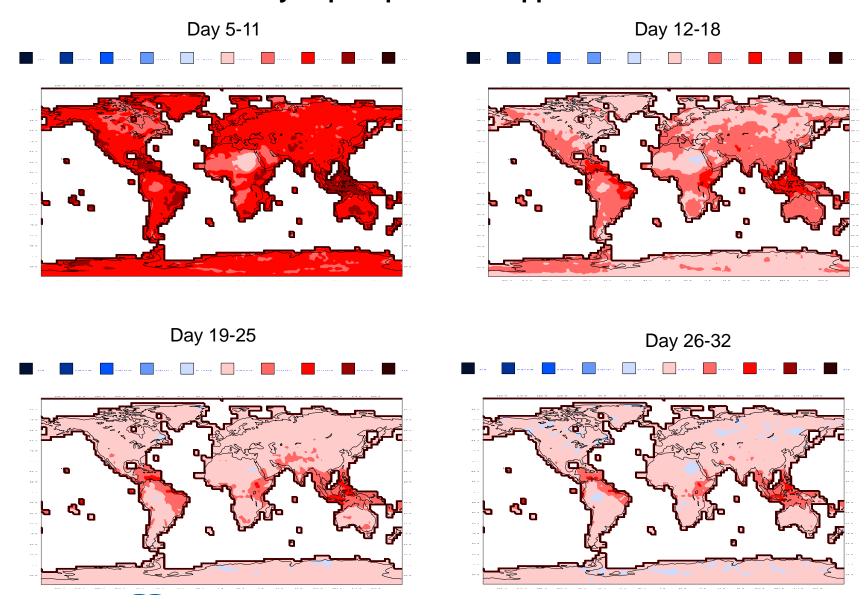
## ROC Area - ECMWF extended-range forecasts 2010-2020 Probability of precipitation in upper tercile.

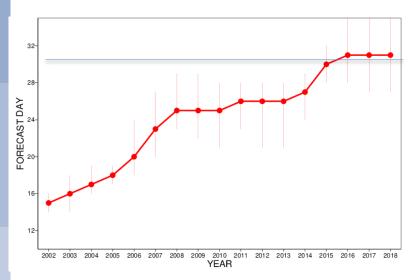


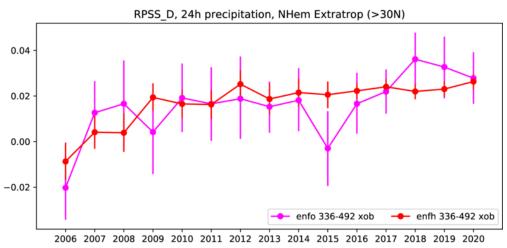
## **Evolution of skill scores**

Prediction of some important sources of S2S predictability, such as the MJO, has improved significantly over the past decade, but not the prediction of precipitation over the northern Extratropics.

MJO RMMS
Bivariate correlation reaching 0.6

RPSS Precipitation
North America – Day 19-25







## Impact of the MJO on the N. Extratropics

Composites of Z500 3rd pentads after an MJO in Phase 3 NDJFM

3 pentads after MJO in phase 3

